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ORIGINAL DEPARTMENT.

LECTURE.

INFLAMMATORY OBSTRUCTION OF THE BILE DUCTS; ALBUMINOID DEGENERATION OF THE LIVER, SPLEEN AND KIDNEYS.

A Clinical Lecture, delivered at the Hospital of the University of Pennsylvania, November 1st, 1879.

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REPORTED BY WM. H. MORRISON, M.D.

Gentlemen, I wish to call your attention to-day to two cases, not at all similar, but in both of which we have a question arising as to the nature of the enlargement of the liver. The first is a resident of West Philadelphia. He is an officer of the Grand Army, and at a recent display of that organization carried a heavy flag, with the flagstaff resting against the epigastrium, for a number of hours, and soon after he noticed pain in this situation. He is sixty years old and sober; he never had jaundice before; no attack of hepatic colic.

On examining him, we notice, in the first place, deep jaundice. I will not dilate upon this symptom now, for I have fully discussed it in another case. The urine is deeply colored with bile, and the stools are of a putty color. The urine has not been examined for the biliary acids. With this jaundice we have, as usual, dyspeptic symptoms, poor appetite, flatulence, weight in the epigastrium, and irregular bowels. You will nearly always, in cases of jaundice, find that the digestive functions are much deranged. These symptoms are pronounced in proportion to the obstruction to the flow of the bile. In the present case this obstruction is very marked.

When we meet with a case of jaundice, we must try to arrive at a knowledge of its cause. We first try to show, if we can, that it is due to obstruction, and then we try to discover how the obstruction is brought about. The most important causes of obstruction are, in the first place, the impaction of gall stones in the ducts of the liver. In such cases the attack comes on suddenly, with pain under the right ribs, frequently attended with vomiting and marked prostration, usually terminating rather abruptly, and followed in the course of from six to twenty-four hours by jaundice. The patient will frequently have more than one attack. You will observe that in this case we have no such history.

Again, we have seen that tumors outside the liver, and pressing upon it, will cause jaundice; thus, tumors at the head of the pancreas, enlargement of the glands in the transverse fissure of the liver, tumors of the pyloric extremity of the stomach, and of neighboring parts, will cause it. Tumors of the liver itself, particularly malignant tumors, may press upon the ducts and give rise to jaundice. But in these cases the jaundice is at first slight, and gradually increases. In the present case we have a distinct history of an acute beginning, and further examination shows no solid tumor.

What other causes of jaundice have we? Unquestionably, one of the most frequent causes of jaundice is obstruction arising from inflammation of the biliary ducts. The common duct of the liver passes obliquely through the wall of the duodenum, and at its mouth there is a little tit-like process. In this situation we have a num-

ber of ducts, the common duct, cystic duct, hepatic duct, and the converging ducts of the liver. All these are lined with mucous membrane, which is very liable to become inflamed. Any cause may start this inflammation—a blow from the outside, very acrid, irritating or indigestible food in the duodenum may cause it, or it may arise from the action of cold. Thus we have inflammation of the mucous membrane, and it frequently begins in the duodenum, and reaching the common duct passes into it, and causes swelling, thus obstructing the passage of the bile. In bad cases ulceration, with subsequent cicatrization and absolute occlusion, may occur.

Now, in our patient, has this been the case, or is his jaundice due to another cause, that is, local peritonitis around these ducts, with exudation matting them together, and forming adhesions, thus causing more or less occlusion of the ducts? I think that you will agree with me that this case depends upon one or the other of the last two causes. When the mucous membrane of the bile ducts is inflamed, the mucous membrane of the duodenum usually sympathizes, so that generally you will find, in an attack of acute catarrhal jaundice, that the attack has been accompanied with or preceded by signs of irritation of the gastro-intestinal canal; that there has been loss of appetite, coated tongue, nausea, vomiting, and looseness of the bowels. Now let us inquire how it was with our patient. He was seized, the day after carrying the flag, with vomiting and purging, followed in a few days by jaundice.

To what changes has this inflammation given rise? I find on examination that the liver is considerably enlarged; the left lobe extends below the xiphoid cartilage; the right lobe is about an inch and a half lower than normal, and here, just as in that case of pancreatic tumor pressing upon the gall duct, which you saw at the last lecture, I find the gall bladder distended, and about the size of a turkey's egg. The indications, then, are, that in consequence of an acute attack of gastro-intestinal catarrh, caused partly by exposure and partly by direct irritation, the inflammation has extended up the common duct, and has led to such a degree of thickening that the duct has been entirely occluded. This occlusion has now remained for five months. There is, then, reason to fear that serious changes have taken place in the walls of the bile ducts.

What is the effect upon the liver? Remember, that it is not only the ducts themselves that are involved, but also the ducts in the liver itself. In consequence of the obstruction the ducts become immensely distended with bile, their walls are irritated, and unhealthy mucus is exuded from the lining membrane. These products undergo decomposition, and cause inflammation of the liver. So that, as a consequence, we find the liver enlarged, not only from retention of the bile and distention of the ducts, but also from the slow inflammation of the interstitial connective tissue. If in the rabbit you tie the gall duct, you will find that it is followed by a sort of hypertrophic cirrhosis; so here we have the liver in a state of hypertrophic cirrhosis, with distention of the vessels, distention of the bile ducts, and thickening of the interstitial connective tissue. In some cases we have symptoms of septic poisoning, from the absorption of putrescent matters from the bile ducts. This form of jaundice, with fever, is a very grave condition.

These attacks of inflammation of the bile ducts are often accompanied by spasm. It is then very difficult to diagnose this condition from the passage of a gall stone, with bruising of the mucous membrane. The diagnosis can only be made by taking the stools, mixing them with water, reducing them to a powder, and passing them through a sieve, so that if there be a calculus it may be discovered. Catarrhal jaundice is often accompanied by as violent pain, vomiting, prostration, etc., as the impaction of a gall stone. Therefore, when we have a patient with such a history, particularly if there has also been a gastro-intestinal catarrh, we should wait until we actually have the gall stone before deciding that the trouble was due to that cause.

We find, in cases of persistent obstruction of this kind, that the portal circulation suffers great congestion, and ascites makes its appearance. Now this is simply an indication that the obstruction of the gall duct has resulted in a thickening and induration of the connective tissue of the liver, which presses upon the venous branches, and thus causes such an impediment to the portal circulation that it relieves itself by an exudation into the peritoneal cavity. This man's feet also swell at night.

Now, as to the mode of treatment. In these cases, as in all cases of catarrhal jaundice, our aim must be to relieve the inflammation, remove the swelling, and restore the patulous condition of the duct. The treatment should, in the first place, embrace a careful attention to the diet, which should be nutritious and digestible; secondly, counter-irritation over the seat of the inflamed duct; thirdly, the use of such remedies as will render the bile more dilute, and which

will cause it to flow more freely, and will at the same time tend to favor the reduction of the congestion of the mucous membrane. For this purpose saline mineral waters containing sulphate of soda, sulphate of magnesium and chloride of sodium are useful; or small doses of these salts in a large amount of water may be used; lastly, the use of alterative remedies which will favor the absorption of the exuded materials; among this class we find the subnitrate of bismuth, nitrate and oxide of silver, the astringent salts of iron, and the mineral acids. The silver salts are the most useful if their use be persisted in for a long time. If the inflammation has been attended by ulceration and cicatrization of the mucous membrane all treatment will prove ineffectual. Where a case has lasted as long as this one this danger is to be feared; but I have seen cases of much longer duration than this yield to treatment. Our treatment will consist, then, of blistering, the use of nitrate of silver, and the use of Rochelle salts in a large amount of water, every morning.

Albuminoid Degeneration of Liver, Spleen and Kidneys.

Now, in the next case we have a man thirty-six years old, who, fourteen years ago, was infected by syphilis. This was followed by secondary symptoms of marked severity, which seemed to yield to treatment, as they so frequently do. For the past year he has been complaining of symptoms of failing health, loss of strength, loss of color and loss of flesh; severe pains over the liver, but no jaundice; symptoms of indigestion, but no vomiting. The bowels have been opened twice a day for about ten days of each month. He has passed a good deal of water lately, and has to get up during the night. The urine has at times been high colored, but not turbid. There has been, then, these symptoms of failing health, loss of flesh, strength and color. He has had hectic fever, as is not unfrequently met with in specific disease. He has disturbances of the digestion, with marked tendency to looseness of the bowels, and a progressive increase in the amount of urine, which has remained clear. Notwithstanding the fact that the urine is passed more frequently and in greater quantity than normal, there has been dropsy of the lower extremities. Our attention is directed more particularly to the gastric and renal symptoms.

I shall first study the kidneys. I examine the urine and find that it contains about three per cent. of albumen. We have also present a considerable amount of the coloring matter of the blood, as is shown by the change of color on the addition of nitric acid. You are apt to see this change where the blood is undergoing disintegration from hepatic or splenic disease. The specific gravity of the urine is 1.012, and it deposits hyaline tube casts on standing. The kidneys then present evidence of organic disease; but before trying to discover the form of disease, let us study the other organs.

Examining the abdomen, we find it enlarged. This may be due either to the enlargement of the contained organ or distention by gas or liquid. There is very little, if any, dropsy. The resonance is good all over the bowels, but at the upper part of the abdomen, about a hand's breadth below the margin of the ribs, the percussion note is flat. This dullness extends upward to the third rib or second interspace. The vertical extent of the dullness on the right side is ten and one-half inches. The left lobe is even more prominent than the right, and extends to about the same height. The dullness extends on the left side until it meets that of the spleen. The spleen is felt projecting below the ribs on the left side. Here we have, with the renal trouble, marked enlargement of the liver and spleen.

We have, for ordinary descriptive purposes, three forms of chronic organic renal disease. First, the granular, contracted kidney, in which we have a large amount of urine, a small amount of albumen, little dropsy and few tube casts. Secondly, the large white or catarrhal kidney, in which the urine is small in quantity, containing a large amount of albumen, and attended with dropsy. Thirdly, the waxy kidney; here we have a large amount of urine of about the specific gravity of 1.012, but not so great a quantity as in the granular kidney, and the albumen is moderate in quantity. A considerable number of hyaline tube casts are found. Despite the large amount of urine passed, there will be progressive dropsy; and further, we will usually find that associated with the renal trouble there is disease of other organs, particularly the liver and spleen. The liver and spleen, although so much enlarged, have retained their normal shape, indicating that the hypertrophy is due to the infiltration of the organs with this albuminoid material. I have weighed livers of fourteen or fifteen pounds, taken from cases of this disease. There is little pain unless there is some associated peritonitis, as constantly occurs in certain specific diseases. It is not attended with jaundice, neither is it so apt to be attended by dropsy of the abdomen as cirrhosis, although

near the close of the case ascites is apt to make its appearance. It is not attended with the formation of irregular nodules, as in cancer.

When, then, we meet with a case in which we have the characteristic symptoms of albuminoid degeneration of the kidneys, with associated enlargement of the liver and spleen, we have to do with a case of general albuminoid degeneration. The mucous membranes are also involved; the walls of the blood vessels are thickened and changed, and thus we are apt to have hemorrhage. There has been no hemorrhage in this case. Frequently there is a serous discharge, and you have observed that here we have a marked tendency to diarrhœa.

This disease is not due to a local cause, but to the infiltration which results from a depressed and cachectic state of the system. Thus, we find it appearing in long-standing scrofulous disease, especially where there has been suppuration, and where the nutrition has been depressed for a long time. We find it in long-standing suppuration and exhausting discharges, independent of scrofula; but there is no condition of the whole economy which is so apt to cause it as long-standing constitutional syphilis. Indeed, it might almost be regarded as internal syphilis. The principal organs that are attacked are the glands, the liver, spleen and kidneys. We should always investigate the past history of our patient, as the treatment will be governed by the cause.

The treatment of this condition is best considered under three heads. In the first place, bearing in mind that it is a wasting cachexia that is the cause, we use nutritious food with cod-liver oil, preparations of malt, iron, etc.; secondly, we treat the cause of the disease. Now, in such a case as this, where we cannot doubt the specific nature of the trouble, we will use a specific anti-syphilitic treatment; but in these cases, where we have a weak state of the digestive organs, we must be careful how we use the iodide of potash. I would prescribe here the iodide of mercury, with iron and a vegetable tonic; and lastly, our treatment must be based upon the special characteristics of this degeneration, and on this ground we administer salines, particularly the phosphatic salts, as they appear to be indicated by the fact that if we examine the liver from cases of this disease it will be found extremely deficient in salts, especially those of soda and potash. We, therefore, administer the phosphite and hypophosphites of soda and potash; but I am not at all certain that we can in this way replace the deficient salts.

COMMUNICATIONS.

CHYLURIA.

BY J. T. ESKRIDGE, M.D.,
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Read before the Northern Medical Society of Philadelphia.

To better introduce the subject of this paper I will read the notes of a case of chyluria which first came under the care of Dr. J. Moore Campbell, some months ago. He, at my request, has kindly furnished me with a detailed history, and brought the patient before the Society to-night.

S. R., male, aged twenty-three, Cuban by birth, and a cigar maker by occupation (as was also his father); was quite healthy until fourteen years old, never having suffered any of the diseases incident to early childhood. At the age of fourteen he first noticed his urine was whitish. The lower portion, after standing in a vessel for some time, was of a gelatinous consistence. About one year later the whitish appearance of his urine alternated, for a few days, with a bloody appearance. Occasionally thick gelatinous masses, which almost closed the urethra, were passed at the first morning micturition. The passing of blood did not exceed three days, and has not reappeared since. The whitish and gelatinous condition of the urine has continued intermittingly since its first appearance. After the urine first became whitish it continued so about one month, and then was normal in appearance for about the same period. It thus continued to alternate in appearance from month to month for about two years. After this his urine was decidedly white at some time each day for a period of six months. During a portion of this period his urine appeared almost normal in the afternoon. Again an intermission of a month or more occurred with normal urine. Following this his urine was white about three-fourths of the time for several months. At times his urine was white in the morning and normal in the afternoon; at other times it was normal in the morning and white in the afternoon. When eighteen and a half years old his urine became natural in appearance, and so continued for seven months. When nineteen years old it was normal in the afternoon and white each morning for about six months, at which time he first came to the States, where he has lived since, and spent most of his time in Philadelphia. During most of the time his urine was discolored gelatinous masses were passed, which at times were quite annoying. The first three

months of his residence in the States was in Baltimore. During this time the discoloration was noticed each day. If the urine was not discolored in the morning it was sure to be in the afternoon. The last three years have been spent in Philadelphia and during most of this time the discoloration has been almost constant. The longest intermission during these three years occurred when he was twenty-one years old, soon after his marriage, and was of three weeks' duration. Of late his urine has been nearly normal in appearance for about two weeks.

He is not given to venereal excess. During most of these nine years which have intervened since the first appearance of chylous urine he has enjoyed pretty good health. He has never been very strong, and has often suffered from a dull headache in the occipital region. He had pain in his back before the trouble first came on. This has continued intermittingly since. At times it has been almost continuous for a year. When gelatinous masses are passed from the bladder he often suffers great pain, and the parts are quite sore afterward. If the mass is very large, a drop of blood follows its passage. There is no impairment of the venereal orgasm. He has been married two years, but has no children. There is no history of chylous urine in his family, so far as he knows. Eye ground and vision normal.

That the subject which forms the caption of this paper is not well understood, is evident from the confusing and conflicting notions held in regard to its pathology. Some of our standard works on the practice of medicine (Flint's, Aitkin's, etc.) have not attempted to discuss the subject.

The literature of this disease is comparatively meagre, especially when thirteen cases have been witnessed by one observer (Prout).

The disease has probably existed from time immemorial, but it does not seem to have received more than passing notice, indeed, if it were at all recognized, until about seventy-five years ago. The number of reported cases are hardly numerous enough, if all were accurately tabulated, to enable us to determine whether it occurs more frequently in the male or female. Of the thirteen cases observed by Dr. Prout, five of the patients were males and eight were females. Mr. Thomas (according to Watson) saw at least a dozen cases during a residence of ten years in the Barbadoes. All these occurred in the colored race; the sex is not mentioned.

The infrequency of this disease, especially in certain portions of the world, may be inferred, when Sir Thomas Watson tells us in all his experience he never saw a single case. Bartels (Ziemssen, vol. xv, page 82) has only seen one. Many physicians who have enjoyed a large practice during a long life have never seen a single case.

Chyluria is preëminently a disease of the tropical climates. Bartels, just quoted, favors the view that a residence in a tropical climate is almost necessary to the development of the disease. He gives the Brazils and the southern part of North America as the most common locality of this disease. All of Thomas' cases—twelve or more—occurred in the Barbadoes. Of the thirteen cases seen by Dr. Prout, seven of them were either natives of the East or West Indies, or were persons who had lived a long time in hot climates (Watson). Dr. Oehme (*The Monthly Abstract of Medical Science*, March, 1875) reports a case of intermittent chyluria. The patient had never been in the tropics even for a day. Of Dr. Prout's thirteen cases, it will be remembered, only seven, or a little over one-half, had been in hot climates. The tropical climates, as Watson remarks, undoubtedly predispose certain individuals to this disease. He refers to one case, not seen by him, in which drinking cold water while the body was heated seemed to act as the exciting cause, and to others in which exposure to cold was thought to have something to do with the attacks.

The clinical history of this disease varies greatly in different individuals. In some the general health seems to suffer but little for a long time, although, ultimately, it must show the effects of the wasting process. Some have suffered for nearly twenty years with the disorder upon them all the time. The patient before you has suffered about nine years from it. According to Watson, the lighter cases are attended with slight feverishness, some uneasiness in the back and loins, some thirst, dry skin, and torpid bowels. In the severer cases the symptoms may simulate those of diabetes; the thirst becomes urgent, appetite craving, with some emaciation and debility. The severer the case the more tendency does the urine have to coagulate in the bladder. In some cases great difficulty is experienced in voiding it, the clots having blocked up the urethra. Dr. Prout (Watson) states he has known this to constitute the chief difficulty of the disease. Our patient often experiences considerable pain and difficulty in passing water when large clots are passed with it.

Urine.—The urine looks white, like milk, and

its color is most marked soon after a full meal. In the marked cases it stiffens as it cools, taking the shape of the vessel which contains it. Some specimens passed a few hours after eating coagulate into two separate portions, the upper being matter which has been thrown up after the urine has stood several hours. This portion of the coagulum, like ordinary cream, contains an oily principle. The lower portion is whitish, and has a fibrinous or fleshy appearance, which is often tinged with blood. It has a specific gravity of 1.015 to 1.025, and is acid in reaction. On heating it the odor of urine is developed. Heat and nitric acid will render the urine almost solid, although neither alone seems to be capable of coagulating it. Ether dissolves out the fat and leaves a yellowish, butter-like mass on evaporation. Bartels says, in the case seen by him, that there was 1.14 per cent. of solid fat, and 0.98 per cent. of solid albumen in a specimen of the urine. According to this author, the fat behaves, in every particular, like that of chyle. Albumen with fibrin is always present, and at times is so great as to cause coagulation of the urine in the bladder.

Microscopic Appearances of the Urine.—The fat is in a very fine state of division, and no fat corpuscles are found. Dr. L. B. Hall states, after examining a well-marked specimen from the patient before you, that he "was unable to detect any definite form with a Tolles' one-fifth inch objective. The fat is in a very fine state of division." Bartels says that "white and red blood corpuscles are always present," and "my experience tallies entirely with that of other observers, in that I have always failed to discover renal casts." None were found in specimens of urine from the patient before you. When the urine coagulates in the bladder and blocks up the urethra, symptoms akin to strangury from cantharides are produced. In some cases the chylous urine is present nearly all the time; in others distinct intermissions occur, in which the urine is free from all appearances of chyle. In the third class chyluria occurs temporarily at long intervals.

Watson, in referring, as I suppose, to Dr. Prout's cases, says: "Two of the females, while laboring under the complaint, became pregnant, and brought forth healthy children; and one of the two lived nearly twenty years with the disorder upon her all the time." Again he says: "Occasionally the complaint ceases of its own accord, even for years, and then recurs, without any apparent cause."

Bartels seems to regard it as an irregular disease. On page 32 (Ziemssen, vol. xv) he says: "The urine in this disease presents, on exceptional occasions, at rare and long intervals of time, an aspect that might easily be mistaken for milk;" and on page 33, "Both the aspect and character of the disease vary from time to time; for months the water may be clear and transparent, and neither albumen, fat, nor any elements of the chyle be traceable in it."

The case before you has been regular most of the time in its irregularity.

Various theories have been advanced from time to time, to explain the phenomena present in this disease. All are as yet unsatisfactory, as none have been proven by autopsies. Dr. Prout, before referred to, has attributed this disease to "a double fault;" the first, he thinks, is found in the organs of assimilation, and the second in the kidneys. According to this view, by some derangement of the assimilative process, the chyle is not raised to the blood standard, and being unfit for its use it is ejected through the kidneys. These organs allow it to pass through unchanged, instead of converting it into the lithate of ammonium as usual.

Sir Thos. Watson, in referring to the long intermissions in which the patient is apparently free from the disease, and then to its recurrence without any apparent cause, says, "We may conclude from these circumstances that it is a purely functional disorder."

Dr. Bartels says, in speaking of the subject of chyluria, "As to its exact nature we are still uninformed," and "we have been forced to content ourselves with the following hypothesis: that in chyluria some abnormal communication must exist between the lymph and chyle vessels on the one side, and in the renal organs on the other." He endeavors to justify this view by referring to cases in which chyle escaped from other portions of the body as a consequence of the dilatation of the lymphatics,* and refers to the anatomical proof of lymphiangioma in the kidneys.† He says, "As it is chyle, and not lymph, we are forced to the conclusion that, owing to some insufficiency in the valves of the lymphatics, actual chyle from the chyle duct (cisterna chyli) forces its passage backward into the lymphatic fistula."

In the *Medical Times and Gazette*, for April 10th, 1869, a case of "Enlargement of the Right Lower Limb, with Distention of the Sub-

* Kühne, Lehrbuch der Physiologischen Chemie, S. 543.

† *Heschl, Wiener Medicinische Wochenschrift*, 1866, No. 31.

cutaneous Lymphatics of the Penis and Scrotum, and occasional discharge of Chylous Fluid," is reported. Similar cases are reported in the *American Journal of the Medical Sciences*, for 1863, by Dr. H. V. Cartz, of Bombay. He rejects the theory of Dr. Prout, and attributes the disorder to an abnormal distribution of chylous fluid. Watson says, "In one of the fatal cases the body was examined and the kidneys found perfectly healthy." Other fatal cases are reported, with autopsies, but in none of these that I have looked over, including the one mentioned by Sir Thos. Watson, is any mention made of a critical microscopical examination of the kidneys. Nothing positive regarding the true nature of the disease can be ascertained till we have a number of typical cases well studied, both clinically and pathologically.

Judging from the cases already reported, longer or shorter intermissions, with apparent freedom from the disease, may take place, and these may be prolonged over fifteen, twenty or more years, but death will finally be reached, especially in the well marked cases, by exhaustion.

It has been found in those cases that are severe enough to run down the health and strength of the patient, that when an intermission occurs, either from treatment or of its own accord, the general health greatly improves, and the patient may again become quite robust, to be again reduced by a recurrence of the disease.

It is very hard to estimate the value of any remedy in this disease, since long periods of freedom from the discharge occur, irrespective of treatment. Most, if not all, who have had much experience with this rare malady, agree in recommending some of the astringents. Whatever agent is used, it is, so far as we know, likely to give only temporary benefit; and the chylous discharge will return, despite our remedial agents. "Dr. Prout used the mineral acids; astringents, among which may be mentioned acetate of lead and alum; opium and counter-irritation."* Watson adds, "But the suspended symptoms have always soon returned." Others recommend gallic acid in full doses. In the absence of the knowledge of the true nature of the disease, the treatment must be merely empirical. If astringents give the best result I should be inclined to add ergot and Monsell's salt to the list of astringents used by Dr. Prout. Strychnia, as a general tonic, and as giving tone to the muscular fibres, both voluntary and involuntary, should receive a trial.

* Watson.

Hospital Reports.

PRESBYTERIAN EYE AND EAR CHARITY HOSPITAL, BALTIMORE.

PROF. JULIAN J. CHISOLM, M.D., IN CHARGE.

Reported by EUGENE F. CORDELL, M.D., Member of the Baltimore Academy of Medicine, etc.

Incipient Cataract.

CASE 1.—The patient was a woman, aged eighty. At forty-five years of age, owing to her failing sight, she began to wear glasses, as is usual with persons who have good eyes. These convex spectacles had been properly changed from time to time, with advancing age. When seventy-five years of age the strong glasses no longer suited her; she had, therefore, to resume some of the discarded ones, and for the past year she has been able to read the finest print without the aid of glasses. In other words, she has regained her second sight. As she regained her sharp sight for near objects, her distant vision became somewhat cloudy, and she could no longer recognize friends across the street. Very recently near vision has somewhat failed, and hence her visit to the Hospital. Glasses no longer avail for either distant or near work. Prof. Chisolm referred to the restoration of second sight as causing great delight to the recipient, who would often boast of the newly-acquired gift; but to those who had studied the matter, and could look into the future conduct of such cases, this second sight was often a cloud on the horizon, which, in time, would bring on the darkness of a mature cataract, of which second sight is so often the precursor. This patient was then taken into the ophthalmoscopic room, where an explanation was found for the smoky sight, in the clouding of the lens. It was swelling of the lens, with increased curvatures, in the incipient state of cataract, which allowed of short focusing. This case of second sight was not an exception to the rule, that the restoration of strong sight in old age, and the abandoning of spectacles for reading, are usually precursors of cataract formations.

Lens Dislocated into Anterior Chamber.

CASE 2.—A negro man, aged fifty-nine, had been struck in the eye four years ago. The other eye had been injured twenty years ago, and now exhibited superficial corneal ulcerations, with general injection. In the eye more recently injured, a white, smooth body was seen in the anterior chamber. It was a degenerated crystalline lens, still enveloped in its capsule, but opaque and pearly in appearance, and much diminished in size. The iris was of good color, with freely acting pupil, but no sight. As the lens in its new position was causing no irritation, Prof. Chisolm declined to remove it, especially as no sight could be obtained after the operation, which, for the present at least, was uncalled for. The blow, when received, had ruptured the suspensory ligament of the lens, enlarged the pupil, and allowed the now freely movable lens to escape through the pupil into the anterior chamber. Usually, much inflammation is set up by this change of place, necessitating the early removal

of the now foreign body. This patient had had no iritic trouble from the presence of the lens in the anterior chamber for four years.

Exophthalmic Goitre, with Conical Cornea.

CASE 3.—A white woman, of delicate frame, aged 27, exhibits the double form of disease in a very exaggerated condition. Four years since the trouble commenced with heart palpitations, which she attributed to dyspepsia. In the course of time she became anæmic, and the eyes became prominent, the neck at the same time becoming enlarged. At present, all of the symptoms of exophthalmic goitre are very conspicuous. In addition to these distressing appearances, she became very near-sighted, and at present vision is so disturbed that she can scarcely walk the streets with safety, for fear of being run over in crossing. The cause of extreme near-sightedness is found in the change of shape of the eyeballs. The cornea in each eye juts directly outward, in a very marked conical form, which, when viewed sideways, look as if a large drop of molten glass had been superadded to the corneal surface. As if she had not trouble enough, the margins of the lids are red and thickened with blepharitis. As to the exophthalmic goitre, so far no treatment has proved of any avail. She has tried tonics, belladonna, and electricity. The conical cornea is her greatest annoyance, and Prof. Chisolm proposes a plan for relief which promises to shrink back the cornea somewhat into its old shape, although at the expense of central transparency, and then by iridectomy to remove a good deal of the present irregular and defective refraction. The plan is to perforate the centre of the cornea with a red hot needle, and cause an ulcer, which in cicatrizing will shrink back the corneal protrusion. Before performing this operation he desires to get the patient in better condition, by country air and a general hygienic course.

Albuminuric Retinitis.

CASE 4.—A man, aged 55, was sent to the Hospital for inspection, on account of failing sight. In the left eye his vision has been growing dull for one week, and in his right, for three days, vision has also been smoky. He cannot now read, and cannot carry on his work as clerk. He complains of no pain in the eyes, nor in any part of the body. Does not smoke or drink; has never had syphilis, and up to one week ago has had uniformly good vision. The eyes, to ordinary inspection, exhibit no disease. There is no injection, the pupil acts well, and is of good color. A careful ophthalmoscopic examination showed a suffused disc, and glistening white spots at the fovea centralis, or yellow spot of Soemerring, which led Prof. Chisolm to diagnose Bright's disease of the kidney. His urine was now examined and found full of albumen, in confirmation of the general disease which the ophthalmoscope had revealed. Often, at the eye dispensary, an examination of the condition of the retina puts the physician on the right track of a distant affection, which has involved the eye linings secondarily.

The Presbyterian Eye and Ear Charity Hospital has, in the short space of two years, become one of the largest charities in the city of Baltimore, and offers a fine field for the study of eye and ear diseases.

MEDICAL SOCIETIES.

NORTHERN MEDICAL SOCIETY OF PHILADELPHIA.

Reported for the MEDICAL AND SURGICAL REPORTER.

After the reading of Dr. Eskridge's paper upon Chyluria, the Society postponed the discussion, to enable the members to see and observe the patient.

At the next meeting Dr. Eskridge again introduced the subject, stating the chief interest to him resided in the pathology of the case, without a definite knowledge of which treatment, at best, must be empirical. Two suppositions have been made. First. That there exists a direct communication between the chyle ducts and the uriniferous tubes, permitting the regurgitation of the chyle to mingle with the urine. Second. The theory of Prout, who supposed that the chyle remained in the blood unassimilated, and was thence eliminated by the kidneys as foreign matter.

Dr. L. B. Hall remarked the well-known fact that in diabetes mellitus fat exists in the blood in a fine state of division, like that of chyle, and that there existed a corresponding change in the background of the eye. He had, therefore, examined this patient very carefully with the ophthalmoscope, to see if the retinal vessels indicated an abnormal amount of fat circulating in the blood, according to Prout's theory. He had rarely examined so healthy an eye; and except a small degree of hypermetropia, he could discover absolutely nothing abnormal. This, together with the fact that when fat does circulate in the blood (diabetes) the kidneys do not excrete it in the form of chyle, proves Prout's theory to be wrong. This patient complains of a constant headache, antedating the chyluria, having exacerbations more or less parallel to the whiteness of the urine. This pain he locates in the occipital region, extending, when severe, to the middle dorsal region of the spine, accompanied, at times, with giddiness, and tendency to fall forward and to the right side. He attributes this to bad ventilation of his workshop, but we all know that the headache from impure air is generally located in the anterior part of the head; besides, it would hardly continue without intermission for so many years (beyond his memory).

Again, we know that irritation of the floor of the fourth ventricle will so change the functions of the kidneys as to cause sugar to be excreted. And should we not, therefore, look in this region for the nervous centre controlling their functions? The history of this case points to this same region, as far as symptoms can point to the seat of the pathological lesions. On this supposition, it is very easy to account for the failure of the post-mortem examinations which have been made in this disease. The attention has been exclusively directed to the kidneys themselves, or to the thoracic duct, and not to the brain.

Dr. J. B. Walker. The liver is supposed to be the source of the sugar excreted by the kidneys in diabetes, and also from irritation of the floor of the fourth ventricle. He believed, however, that Dr. Hall had given the correct pathology of this case. There appears to be a correlation between the sugar and fat in the blood and in the excretions. This patient has a great distaste for fats, but consumes a large amount of sugar. He would like to see the experiment tried, of limiting the diet by excluding, as much as possible, both sugar and starch. We now know that astringents had and must fail to relieve this trouble.

Dr. Eskridge replied, that the liver had nothing to do with the excretion of fat, and that no irritation of the floor of the fourth ventricle had ever produced fat in the urine.

Dr. E. R. Stone exhibited a specimen of necrosis of the lower jaw, which he had recently removed from a child.

He called attention to the large size of the sequestrum, involving nearly half of one side. In the history of the case there were two points of interest. 1. It began without apparent cause, like an ordinary toothache, which ceased suddenly, and when examined by the doctor, some time after, the part was without sensation. 2. At the time of operating it was difficult to ascertain the separation of the sequestrum before making the cut, it was so firmly bound by the soft parts.

The Committee to examine the morbid growth presented by Dr. Updegrove made the following report:—

The mass we found to consist of two distinct parts. One a small oval tumor, measuring two and three-quarters by two inches in diameter, and presenting the ordinary characteristics of a uterine fibroid. We present a section for examination under the microscope.

The other and principal portion consisted of a series of sacs, varying in size from fourteen inches in diameter (the largest) to the size of a pin's head; the smaller ones being almost innumerable.

The largest one had been evacuated of its contents; the others contained a translucent liquid, slightly gelatinous, or a buttery mass of fat, containing remains of epithelial cells, or both of these combined. In other words, it was an ovarian cyst of the multilocular variety.

One of the smaller sacs contained, in addition to the sebaceous, fatty matter, a ball of hair, and the chief interest of the specimen was centred in this so-called "dermoid tumor."

Dermoid tumors have been recorded by a number of observers, but as yet no very satisfactory account of their pathology has been given. Allow us to cite a few authorities, to show the confusion:—

Blumenbach said they originate in the "Nisus formativus" (whatever that may mean), independent of sexual congress. Coley attributed them to incomplete fecundation, as also did Mickel. Heller considered them the remains of a fœtus. Velpeau gave the same opinion. Cruveilhier says they are either the result of extra-uterine fœtation or monstrosities by inclusion. Ritchie considered every ovarian dermoid an ovum. Grailly Hewitt is certain that they originate in the Graäfian follicle. Spencer Wells says, "We know that an ovum may become developed into a dermoid cyst." Kiwisch: "They have been found in the undeveloped female, in the male, and in other parts of the body, as well as in the ovary, and, therefore, cannot be explained by conception."

Your committee have, therefore, examined this part of the specimen submitted with the greatest care; not expecting to solve this difficult problem with a single example, but believing that every case carefully observed and recorded will be one step toward a correct interpretation of this strange phenomenon.

This dermoid, from the exterior, could not be distinguished from the other sacs constituting the mass, and was not recognized as in the least differing from them, until opened and the contents discovered. In size it was $1\frac{1}{2}$ by $1\frac{3}{4}$ of an inch in diameter (interior measure). It was somewhat prolonged at four points and across the mouth of one of the prolongations was a bridle $\frac{1}{8}$ of an inch long, $\frac{1}{4}$ of an inch thick, in structure like the wall itself. The wall was of a varying thickness, according to the proximity of the neighboring sacs, was lined with epithelium, and had hair attached to about one-half of its interior surface. At the bottom of one of the prolongations was a small bony plate, about $\frac{1}{4}$ of an inch square, quite thin, and situated between the epithelial and fibrous portions of the wall. A similar though smaller plate was found at one other part of the wall.

Under the microscope these plates show bone corpuscles, but differ from true bone in that they polarize light, and corresponding in both these respects to the calcareous deposits which occur in the choriod of the eye, in the lungs, etc.

The hair, medium brown in color, was rather fine, each gradually diminishing to the free-pointed extremity. The longest measured nine inches in length. They entered the wall at a very small angle, so as to be imbedded for quite a distance in a mass of semi-detached epithelium. The imbedded portion appears, in places, surrounded by a tube of epithelial cells. The attached ends appear broken, and the whole surface of the hair presents a macerated appearance, some of the exterior scales being detached. No undoubted hair bulbs have been detected.

From these observations it is the opinion of your committee that this dermoid cyst was originally of much smaller size, with the hair growing from its interior wall. Exudation taking place (perhaps from irritation of the hairs themselves), the cyst was enlarged by the pressure from within, causing the gradual atrophy and final destruction of the hair bulbs.

This would exclude the idea of its being the remains of a fœtus, by inclusion or otherwise; for such a supposition implies the original development of many other parts which, becoming reabsorbed, leave the less destructible portions, as bone, hair, etc. We should thus have a contracting rather than an expanding cyst. The appearance of the prolongations in the wall, the concentric arrangement of the hair, and the attach-

ment of their larger extremities to the epithelial wall, we think sufficient evidence to the contrary.

The macerated appearance of the hair, together with the plates of calcareous degeneration in the wall of the sac, prove that the process had long ceased to be active, taking no part in the comparatively recent expansion going on in the other sacs, unless, acting as a foreign body, it was the source of the irritation starting the process.

Whether this begun in the ovum, in the Graäfian follicle, or in the stroma of the ovary, independent of these, we find nothing that suggests one rather than the other point of origin. Why and how hair follicles should form in the interior of the body, either with or without conception, we have no suggestions to offer.

Sections of the calcareous plates and of the wall of the dermoid, showing the hair in situ, were exhibited under the microscope.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.

REPORTED BY J. W. PLUMM-BATES, M.D.

Tumor in the Brain.

Dr. Evans. Mr. M., while in the U. S. Navy, fell from the rigging to the deck of the vessel; he was taken up unconscious and carried to a hospital in New Orleans, where he was treated for some months. The only external injury apparent was a large, contused wound about the right temple. The symptoms of internal mischief were persistent vomiting, violent headache and extreme prostration. He remained in hospital eighteen months; was discharged improved but not well, and was allowed a pension by the Government. He consulted me two years after the injury, and six months after his discharge from hospital. His symptoms at the time were violent headache, extreme nausea, and pain through or in the eye. The eyeball stood out, bulging, as if something behind was forcing it forward; sight impaired, and could not read more than ten minutes at a time without becoming very sick. Under treatment he improved, and in two months was able to go around. I found that this improvement was only temporary, for when he would walk any distance he would be seized with all the old symptoms, and compelled to keep his bed for days after. My diagnosis was a tumor pressing upon the brain. He was under my care two years. The eyeball protruded more and moreas time progressed, and finally sight was lost, deafness supervened, and coma, profound and deep, closed the scene, and ended his fearful sufferings. The interest in the case hangs upon this point: was the tumor the result of the injuries received, or was it a syphilitic growth? There was no symptom of syphilis, and the man positively denied ever having had the disease. I think it possible that the tumor resulted from a chronic inflammation of the cerebrum, and that inflammation was caused by the fall.

Dr. Morris. I know of a case somewhat similar, but post-mortem examination disclosed a syphilitic tumor of the brain.

Dr. Monmonier. I think Dr. Evans was correct in his opinion. I have seen many cases of contusions and injuries of the head followed by inflammation and death. In some cases I let out three or four ounces of pus by the trephine.

Use of Jaborandi.

Dr. Caldwell. Some meetings since one of the members spoke of the bad effects sometimes following the use of jaborandi. Lately, I used it on a patient; gave half an ounce in two doses; in a short time there was profuse perspiration and ptyalism. There seemed to be great prostration, and I was sent for, on account of the family becoming alarmed. I gave brandy and coffee, and in a short time the profuse secretion was checked. I have used the drug in several cases, and have not seen any ill effects.

Dr. Evans. I have used it, and in some cases have seen but litttle effect. The article used may not have been good, for we cannot always depend upon the druggist in this matter.

Dr. Cathell. I have just given jaborandi to a patient with the following history: A gentleman, aged fifty-four, proprietor of an iron furnace a few miles from the city, had been declining in health for about two years; consulted me in July, 1878. He was passing large quantities of urine, which was found to contain sugar (sometimes as much as four grains to the ounce, but usually less); costive; foul tongue; acid belching; constant pain in the occiput; and his weight had fallen from 205 to 170 pounds. There was also limited obstructive valvular disease of left side of the heart, evidently dependent upon former rheumatic attacks. Under treatment, rigidly followed, the diabetic symptoms slowly and completely disappeared, but owing to bilious attacks and the abuse of purgative medicines and antacids, his general health remained impaired, and his weight further declined to 155 pounds. In this impaired condition he contracted a severe cold, about February 1st, 1880, which resulted in a moderate attack of pneumonia of right lung, which was skilfully treated by two medical gentlemen of his neighborhood. On February 18th I was called to see him. Upon careful examination the pneumonia was still recognizable but nearly gone, but the old heart trouble and its sequelæ had assumed overshadowing importance. The mitral lesion was increased: both lungs were œdematous posteriorly, and there was a moderate effusion into the pleural cavity; the abdomen was distended with fluid, and the lower limbs were completely waterlogged. Upon attempting to lie down he would, in a few moments, be seized with alarming dyspnœa, which compelled him to maintain the sitting posture; respiration 48; pulse 108, and intermittent; entire venous system congested: face cyanotic and expression anxious; feet and legs cold; mind wandering at times. Knowing that the only hope of rescue consisted in promptly unloading him of the water, one-twelfth of a grain of elaterium was given every hour; seven doses were taken, which brought away by the bowels twenty pints of water, and gave great relief. After two days of rest, food and stimulation, the functions being still oppressed by

the remaining water, five half-drachm doses of Squibb's fluid extract jaborandi were given at intervals of two hours, with the following effect: Patient's face flushed three minutes after taking first dose; three minutes later spitting began, and eight minutes later perspiration broke out, 1st, on forehead; 2d, neck; 3d, groins; 4th, face; 5th, armpits; 6th, arms. Within twenty minutes the entire body was sweating so profusely that he had to go to bed, and for about nine hours he was completely drenched with perspiration. The temperature remained normal during the action of the remedy. The salivation was also excessive. The saliva flowed so fast for five hours that he had scarcely time to speak, breathe, eat or sleep. It did him great good, but it fatigued and alarmed him so much that it would be difficult to get him to take jaborandi again. I estimate that about 14 pints of fluid were eliminated by this remedy. The urinary function also remained moderately active during the action of the medicine. Thirst was not urgent. Jaborandi is surely a great agent in such cases. It and elaterium together accomplished what I think no other agents could have done. They removed from this man's cavities and tissues not less than 34 pints of fluid in three days, which allowed his organs to resume their functions; they reduced his respiration from 48 to 24, his pulse from 108 to 88; they enabled him to lie down and sleep, and with the aid of stimulants and food he was able, on March 3d, to take the cars and come to the city for further treatment.

Sponge Attached to the Cervix.

Dr. Coskery. A woman had a profuse offensive discharge from the womb, and upon examination the os was found to be hard and knotty. I thought it was a case of cancer. A day or two after I had an opportunity to examine with a speculum. On one lip of the cervix there was a brownish-gray looking substance, which resembled a slough. As she had been using an injection of carbolic acid I thought that might have produced it. By slight traction the mass came away, and on examination it proved to be a piece of sponge, one and a half inches in diameter and one-third of an inch in thickness. The hemorrhage was very profuse, and continued for five days; for three days it was so great that I feared for her life. The mucous membrane of the os had forced itself into the porosity of the sponge. The sponge was not in the os, but was attached to the anterior lip of the cervix, and when removed left a raw and ulcerated surface from which the hemorrhage proceeded. I know that the use of sponge, to prevent impregnation, is quite common among women, but have never met with a case similar to this.

Rheumatism.

Dr. Billingslea. Called to see a boy, 12 years old, who complained of severe pain in hip joint. As he had been running around without stockings, and had exposed himself, I diagnosed rheumatism, and ordered gr. xij, of salicylate of soda. The next day he was no better, temperature 103°; soda continued. Third day, no improvement, temperature 104; morphia, bicarbonate and iodide of potassium ordered. Fourth day, worse, temperature 104.5°; tincture of iron, gtt. v.; quinine, gr. iss. every three hours, prescribed. Fifth day, better, temperature 103.5°, and from this time gradual improvement took place and he was discharged. In about a week I was again called to see him with the same symptoms; gave colchicin and potass. iodide, with no improvement. Then gave quinine, gr. xij, with tincture of iron, which had the desired effect. There was no rapidity of the pulse until after the relapse.

Dr. Lynch. In cases of rheumatism I usually give quinine, grains twenty, twice daily, and promptly cure my cases. The remedy has to be given in large doses to produce the desired effect. Have used it for years in all my cases of rheumatism.

Dr. Morris. I have had two or three cases of this disease in which the hip only was affected, and found that quinine was the only reliable remedy.

Eclampsia, Puerperal.

Dr. Cathell. Primipara, aged twenty, seven months pregnant; general anasarca; much œdema; features distorted; labia majora protruded two inches, and so greatly distended that she could not sit. The urine contained about 20 per cent. of albumen. I gave a very unfavorable prognosis. Ten days after I was again called, on account of a severe pain under the sternum; and as she had eaten some radishes, I thought she was suffering from colic, but in a short time she had a severe convulsion. Chloroform was administered freely, and seemed to moderate the convulsions, but did not stop them unless it was given as soon as a twitch was perceived. As yet there had been no labor pains, and no dilatation of the os, but about eight o'clock the os was dilated and the child and placenta delivered. The woman died at 10 A.M., after having had about sixty or eighty convulsions. Bleeding from both arms was tried, as also stimulating injections.

Dr. Morris. How much blood did you take?

Dr. Cathell. Eight ounces from first arm, and ten or twelve ounces from second; probably eighteen or twenty ounces in all.

Dr. Evans. I think it would have been better had you made the attempt to remove some of the water from her tissues at your first visit.

Dr. Cathell. I gave digitalis and spts. æther. nitros. as diuretics.

Dr. Evans. I am accustomed to using croton oil until it acts freely, and then cream of tartar as a diuretic. Was induced to use croton oil from observing its good effects in the dropsy following scarlatina.

Dr. Morris. One point impressed me, viz: the fact of her having eaten the radishes. I have no doubt they acted as the exciting cause. I was called to see a woman whose hands, feet, eyes and face were puffed, who, after eating heartily of cabbage, complained, 4 or 5 hours after dinner, of intense headache. I ordered an emetic, and in an hour or two after the husband again called, to tell me that she complained of blindness. I hurried to the house and found her in convulsions, which came on every 5 or 10 minutes. Labor had commenced. Called Dr.

Wilson in consultation, and we attempted to deliver with the forceps, but failed, and had to perform craniotomy. The convulsions did not cease after delivery. They continued at longer intervals for three days, when the woman died, comatose. Bleeding was proposed but not used. I think the factor of indigestion acts as the exciting cause, and also prevents the efficient action of your remedies. Unless effusion has taken place elaterium will frequently relieve. I believe in heroic treatment in puerperal cases, but it is frequently fruitless.

Rötheln.

Dr. Morris. I wish to call the attention of the members to the fact that an epidemic of rötheln is prevailing among the school children. I have had a large number of cases in different parts of the city.

Dr. Percivall. I think that at least 25 per cent. of the school children are affected, and I have seen, in the last few weeks, between two and three hundred cases.

Dr. Evans. Have seen many cases of this disease, usually very mild, and requiring little or no treatment. In some the child scarcely seems to be sick, the only trouble being the eruption and more or less itching.

Dr. Scarff. Glad Dr. Morris mentioned this subject, as I have been puzzled on several of these cases.

Dr. Billingslea. Had several of these mild cases; but one case was quite severe. Lady, aged 35; pain in back and limbs; throat sore, so that she could not swallow a teaspoonful at a time; throat dark-red and had a disagreeable secretion. The temperature was 102°. The disease wore out in seven or eight days.

Dr. Hamill. Had a number of cases; intense itching a prominent symptom.

Dr. Rennolds. Itching not a prominent symptom in my cases. Have seen about 150 cases; saw first cases about two months ago.

Editorial Department.

Periscope.

Lateral Curvature of the Spine Treated by a New Method.

The *London Medical Record*, March 15th, 1880, has the following:—

Two attempts have been tried unsuccessfully at maintaining extension by means of Sayre's jacket. Dr. Berry obtained Dr. Duncan's permission to try the following treatment: The patient was a boy, aged nine. Two large pieces of extension plaster were applied over the whole of the back, on each side of the spine (straightened at the time by extension in the recumbent position), and reaching well round the sides to the front of the ribs. Having found that by pulling on the ends of the plaster the spine could be easily straightened, a plaster-of-Paris jacket was then applied, according to Sayre's Method, into which was incorporated a steel splint, differing from the jury-mast used by that surgeon, in having a cross-bar at the level of the shoulders, which was capable of being lengthened by means of a rack and key, instead of the ordinary head piece. After the plaster jacket had set, the ends of the extension plaster were brought round the horizontal bar, and tightly sewn in position. On then screwing up the splint to a height which fell short of causing the patient any inconvenience, extension was applied to the skin of the back, the counter-extension being distributed over the pelvis through the jacket The shoulders were at the same time drawn back to the cross-bar, and maintained in that position by means of a turn or two of bandage. The results appear to have been most encouraging, although the patient is still under treatment. The author urges that attention should be paid to the following points: 1. The direction of extension should lie in a plane as close as possible to that of the back. 2. The shoulders should be braced back. 3. The splint should be screwed up at least once a day.

Recovery from Opium Poisoning.

The *Lancet*, March 13, 1880, has the following:—

The recovery of an infant after a large dose of opium is so rare as to deserve notice. An instance lately brought before the Académie de Médecine is one of the most remarkable on record. A teaspoonful of "laudanum de Sydenham" was given to a child three weeks old, in mistake for syrup of chicory, which had been prescribed for constipation. The mistake was made at 9 A.M., and was immediately discovered and an emetic given, without effect. M. Nicolas, who records the case, saw the child soon afterward, and ordered sixty grams of a decoction of galls, and coffee in abundance. The first symptoms presented themselves two hours later, and consisted in somnolence and evidence of nausea, accompanied by tonic convulsions, after which the child passed into a state of prostration, or rather, of complete inertia, which continued during the day. The convulsive attacks were brought on by every attempt to administer a liquid by the mouth, and gradually became more frequent and severe. Even the heart ceased to beat during the syncopal condition which succeeded the attacks of convulsion. As long as they continued there was neither vomiting nor action of the bowels, nor was any urine passed during the first twelve hours. During the attacks of syncope, artificial respiration was kept up. Twenty times the child was thus apparently kept from immediate death. At 7 P.M. the somno-

lence appeared to diminish; the child opened its eyes and looked around. The next day witnessed a marked reaction; the pulse rose to 180, and in the afternoon a little milk, with a few drops of brandy, was swallowed. The following morning the child was sufficiently recovered to take the breast, and on the fourth day was well.

Cure of a Traumatic Salivary Fistula.

In the *Medical Press and Circular*, February 18, 1880, we find a report of the following case by Mr. Henry Morris:—

A shoemaker came under my care in the Middlesex Hospital on June 24, 1879, for bleeding from several incised wounds, one of which was about two inches long, and vertical in direction, on the right cheek. On June 28th saliva was seen trickling from the lower end of this wound, which was all but healed. The patient now stated that since the injury the right side of the mouth felt very hot and dry, and that he had constantly to moisten it by carrying the fluid from the left side over to the right of his mouth. A fine catgut bougie was introduced at the oval aperture of the duct, and passed onward toward the parotid gland until it emerged on the cheek through the fistula. The newly-healed wound was laid open, and the proximal end of the injured salivary duct searched for, and found by squeezing the parotid gland until a little saliva was forced out of the duct. Into this the point of the bougie was inserted and pushed onward for about half-an-inch. The edges of the wound were brought together with three hare-lip pins and twisted sutures, and the bougie cut short, so that a short end, not long enough to be caught between the molar-teeth, was left protruding into the mouth from the slit-like orifice of the duct. The patient at once appreciated a marked difference in the feeling of the right side of the mouth, which was now in all respects like the other side, and he could distinctly feel saliva trickling into it. On July 4th the bougie came away accidentally. The wound on the cheek had been all but healed for four days, but a little discharge still escaped at its lower end. On July 9th a little saliva was escaping still; cotton wool and collodion were therefore continued over the wound until the 15th of July. By this date the wound was securely healed, and all the saliva flowed freely into the mouth. The man was retained in hospital for a few days longer, and was then discharged well. The facility with which a bougie can be passed along the parotid duct from the mouth encouraged the author to think that the same treatment would prove successful in most cases of parotid salivary fistula, meaning by salivary fistula a fistula of the parotid duct as distinct from a fistulous communication with the parotid gland itself, such as occasionally follows abscess below or behind the ear; and also as distinct from an opening into the cavity of the mouth, such as sometimes occurs after necrosis of the jaw, and in cancer. If the orifice of the duct, which is its smallest part, becomes obstructed after long disease, the mucous membrane of the cheek may be punctured, and then a bougie might be passed into the dilated part of the duct, which is just where it pierces the buccinator muscle, and urged along it beyond the fistulous opening. In operations for the removal of tumors of the face, when an incision must be made so as to divide the duct, it would be well to pass a parotid bougie while the patient is still under chloroform, so that the potency of the duct and the flow of saliva into the mouth might be secured during and after the healing of the wound.

The Influence of Phosphorus on the Urine.

The *Lancet*, Jan. 31st, informs us that a series of experiments undertaken by M. Cazeneuve, the results of which have been communicated to the Académie des Sciences, seem to show that phosphorus, given in toxic doses, increases the amount of urea, of phosphoric acid, and of sulphuric acid, and also the total excretion of nitrogen, and of iron. The observations were made upon dogs and cats, and the following serves as an example of the experiments: The daily excretion of a dog having been found to be about 2½ grms. of urea, .15 grm, of phosphoric acid, .18 grm. of chlorides, nitrogen 1.26 grm., and no iron; a centigram of phosphorus, dissolved in oil, was injected, and in a few days the daily secretion of urea was 7½ grm., of phosphoric acid .88 grm., of chlorides .55 grm.; the total amount of nitrogen being 4.9 grm., and the quantity of iron appreciable. There was a trace of albumen, but no blood or bile, although urobilin was present. The excretion of each constituent gradually lessened, and bile pigment appeared in the urine. The excretion having fallen until it was considerably below the normal, 200 grms. of milk were given, which had the effect of raising the excretion of each substance almost to the point reached immediately after the phosphorus had been injected. Phosphorus is supposed, when given in toxic doses, to destroy the red blood corpuscles, and such destruction seems to explain the change observed in the urinary secretion. Modern physiology is inclined to regard the liver as the chief seat of the formation of urea; and M. Brouardel has drawn an argument for this theory from the fatty degeneration of the liver which is produced by the administration of large doses of phosphorus. M. Cazeneuve believes that his results support this theory.

Benzoic Acid in Acute Articular Rheumatism.

Dr. Senator writes, in *Zeitschrift für Klinische Medicine*, Band 1, that he has given benzoic acid in forty-six cases of rheumatic polyarthritis. Small doses were given at first, in order to guard against irritant effects; and finally, ten to twelve grams (150 to 180 grains) of the acid, or twelve to fifteen grams or more of benzoate of soda, were given daily; the acid itself in the form of powder, boluses or capsules; the salt in a solution of ten to fifteen per cent. in aromatized water, with or without sugar. The results of the observations may be summed up by saying, that benzoic acid is a remedy of high value in acute articular rheumatism, though inferior to salicylic acid. Of twenty two cases of acute articular rheumatism, twenty-one were cured within a period varying from two to seven days; in one

case, where the disease was of longer duration, the time required was eleven days. The action of salicylic acid is more decided than that of benzoic acid, which is gradual. Several cases in which salicylic acid had been given without effect, or in which it could not be tolerated, recovered under the use of benzoic acid. One point in favor of benzoic acid was the fact, that in none of the cases treated were there any symptoms of irritation of the stomach, intestines, or other organs. In the cases treated by it there were no relapses, nor cardiac or other complications. Further experience, however, is required in order to determine whether benzoic acid, in spite of the comparative slowness and uncertainty of action, for it failed in several cases, is to be preferred to salicylic acid, on the ground of the permanency of the cure and the absence of complications. The use of benzoic acid appears to be indicated in cases where salicylic acid or its soda salt either cannot be borne, or fails to produce any effect.

The Nature of Scarlatinal and Diphtheritic Contagia, and their Interchangeability.

We learn, from *Central-Zeitung für Kinderheilk.*, No. 23, 1879, that Tschamer found constantly present in the blood, on the epidermic scales, and in the liver of scarlet fever patients, little punctiform bodies, which he recognized mostly as micrococci, more rarely as rods. Culture researches, which were carried out partly in solutions of sugar, partly in paste, resulted in a development of rods, then of spores, and, finally, of branched hyphæ of a mould-fungus, which was recognized as *verticillium candellabrum*. From the spores of the latter were again developed micrococci, the inoculation of which, on the author himself, produced a reddening of the skin around the place of inoculation; he swallowed, moreover, a large piece of the *verticillium*, and remarked, three days later, a slight pharyngeal catarrh, lasting two days. A similar observation was made in diphtheria; the fungi "cultivated" from the urine or diphtheritic membrane belonged to the species *verticillium ruberrimum*. Tschamer adopts Hallier's theory, according to which micrococci can arise from fungus spores, and *vice versa*, as fully applicable to the fungus of scarlet fever and diphtheria; both diseases, according to him, arise from the action of a *verticillium*. This genus, according to Bonorden, breeds on decaying wood.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——A reprint from the Detroit *Lancet*, which we have just received, contains an able treatise on the "Physiological Action of Bromide of Ethyl, by Isaac Ott, A.M., M.D., late Lecturer on Experimental Physiology, University of Pennsylvania.

——We have just received the Annual Report for 1879, of the Western Pennsylvania Hospital for the Insane, at Dixmont, Pennsylvania, containing statistical tables of the cases under treatment during the past year.

——The valedictory address to the class of the Jefferson Quiz Association, at the Philadelphia School of Anatomy and Surgery, March 10, 1880, delivered by John V. Shoemaker, A.M., M.D., member of the American Academy of Medicine, gives a history of the origin and growth of the Jefferson Quiz Association, together with a condensed account of six years' experience in medical teaching. It preserves many facts which will be perused with interest by a large body of previous students of that institution. The style is clear and the subject agreeably handled.

——The Twentieth Annual Report of the German Hospital, of Philadelphia, informs us that the number of patients in the Hospital during the past year was 320, being an increase of 16 over those of the previous year; 26 remained over from 1878, and 294 were new admissions. Of these 260 were males and 60 females; 184 were medical and 136 surgical cases. There were discharged, cured, 201; improved, 54; incurable or unimproved, 10; 30 died and 25 remained under treatment at the close of the year. Their nationalities were as follows: Germans, 196; Americans, 80; Russians, 12; Irish, 11; Swiss, 9; Dutch, 3; Bohemians, 3; French, 2; English, 2; and Hungarian and Welsh, each 1. It contains well arranged statistical tables of the cases treated.

——"Our Homes," by Dr. Henry Hartshorne, is the title of the ninth of the series of the "American Health Primers," edited by Dr. W. W. Keen. In the introduction the author points out that the nearer people live to each other the shorter their lives. He then goes on to show how the evils resulting from overcrowding may be best mitigated, and healthy homes procured, even in large cities. The chapters on ventilation and drainage are illustrated by numerous cuts. The last chapter is devoted especially to working men's homes. This book contains a large amount of useful information, and should be read by everybody.

BOOK NOTICES.

The Principles and Practice of Gynecology. By Thomas Addis Emmett, M.D., Surgeon to the Woman's Hospital of the State of New York, etc. Second edition. Thoroughly revised.

With 133 illustrations. Philadelphia, Henry C. Lea, 1880. 8vo, pp. 875. Price: cloth, $5; leather, $6.

When the first edition of this work made its appearance, less than a year ago, it met with a favorable reception from the profession in all parts of the country, and was universally acknowledged to be one of the best treatises on diseases peculiar to women. This edition having been exhausted in a few months, the author has availed himself of the opportunity to thoroughly revise it before bringing out another edition. In the first chapter the author points out the probable unfavorableness of our American climate to animal life, on account of its great changeability, the effect of which is to stimulate the nervous system at the expense of nutrition, thus rendering us restless in mind and body, and liable to dyspepsia, neuralgia, and other nervous disorders. He condemns, in strong terms, the custom of overtaxing, by hard study, the brains of young girls in the developing period, when the full nervous force should be directed toward perfecting the growth of the body, and especially the organs of generation. In the chapter on principles of general treatment he lays great stress upon the importance of attending to minute details, believing that therein lies wholly the success in the treatment of the diseases of women. No material alteration in the general arrangement and in the contents of the work having been made, though several portions have been rewritten and some new matter has been added, it is unnecessary to say anything further with regard to the second edition, having reviewed the first more fully. The book is one of great value both to the student and the practitioner, and will undoubtedly pass through several editions.

The Essentials of Anatomy; Designed as a Textbook for Students, and as a Book of Easy Reference for the Practitioner. By William Darling, M.D., F.R.C.S., Professor of Anatomy in the Medical Department of the New York University, and Ambrose L. Ranney, A.M., M.D., Adjunct Professor of Anatomy in the Medical Department of the New York University. New York, G. P. Putnam's Sons, 182 Fifth Avenue, 1880. Cloth, 8vo, pp. 629.

This work, the authors inform us, has not been intended to supplant, but rather to accompany, the more exhaustive treatises. Their aim has, therefore, been to present the *essentials* of human anatomy, so arranged as to render their comprehension easy, even to beginners. For this purpose much of the matter has been tabulated, and a few diagrams have been presented, as a means of impressing particular points. The work is divided into six parts: Osteology, Arthrology, Myology, Angiology, Neurology and Splanchnology. The arrangement is in some parts a novel one; thus, under splanchnology we find that after the organs of generation have been considered, the organs of sight, then the organs of hearing and the mechanism of hearing are taken up, and finally a description is given of the perineum of the male, the parts associated with the operation for lateral lithotomy, and the female perineum. The absence of illustrations renders this book worthless as a textbook for students, without the additional use of anatomical charts or of some of the other textbooks which are well supplied with plates, and we doubt whether surgeons possessing any of the standard works, with the arrangement of which they are familiar, would find this any easier for reference.

The Microscope and Microscopical Technology. A Textbook for Physicians and Students. By Dr. Heinrich Frey, Professor of Medicine in the University of Zurich. Translated and Edited by George R. Cutter, M.D., Surgeon New York Eye and Ear Infirmary, Ophthalmic and Aural Surgeon to the St. Catherine and Williamsburg Hospitals, etc., etc. Illustrated by 388 engravings on wood. Second edition. New York, William Wood & Co., 1880. Cloth, 8vo, pp. 660.

In preparing the second edition of this work, the editor has availed himself of the opportunity to thoroughly revise it, and to make such additions as the rapid advance that has been made in the department of histology since the publication of the first edition would necessitate. Thus, a large amount of new matter and many new illustrations have been added; a bolder-faced type has been used and the size of the page increased. Somewhat more than one-third of the volume is devoted to the elucidation of the theory of the microscope, with a full description of the various kinds in use, and the methods of preparing, staining, mounting, etc., of microscopic objects; the remainder being taken up with detailed descriptions of the appearance in health and disease of the more important constituents of the body. The illustrations are unexceptionally well executed, and the work is one which we can heartily recommend to those interested in microscopical researches. Price lists of microscope makers are appended. The general appearance of the volume is good, and does credit to the publishers.

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D. G. BRINTON, M.D., EDITOR.

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THE RELATION OF COW POX TO SMALLPOX.

The relation of cow pox to smallpox has, for many years, been a subject of controversy. It was believed by JENNER that the two diseases are identical, and that the inoculation of a cow with the pus of a smallpox pustule would produce the disease in the animal. As has been observed by a correspondent of this journal, this is the view also partaken of by FLINT. Were it correct, then the bovine virus obtained by inoculating a heifer with variolous matter would be a proper substance to use in vaccination.

But this course of reasoning is contrary to the most accurate observations, and might lead, some say has already led, especially in England, to disastrous results, by introducing a modified form of smallpox in the operation of vaccination.

An able article on the subject has recently appeared in the *Lancet*, from the pen of the well known veterinary surgeon, Mr. GEORGE FLEMING. He brings forward a train of evidences, both clinical and casual, to prove that human variola and cow pox are distinct diseases of a group of exanthemata allied, but neither identical with horse pox and sheep pox. Mr. FLEMING gives, at considerable length, the results obtained by a committee of the Medical Society of Lyons, in 1865, and by the Commissioners of the French Academy of Sciences, in 1866, who examined this general question under the most favorable circumstances and with great minuteness.

The Academy of Sciences Commissioners conclude their verdict as follows:—

"The experiments, the results of which have been just mentioned—experiments as remarkable by their number as by their distinctness (*netteté*) and concordance—appear, therefore, proper to solve the debatable points in view of which they were instituted. In establishing that vaccinia and variola, notwithstanding the features which assimilate them in animals as in man, are, nevertheless, totally independent of each other; that their viruses form two distinct individualities; that the two affections thus constitute two different, immutable species, which cannot be transformed one into the other; that, consequently, to seek to produce vaccinia from variola would be to pursue a dangerous chimera, which would revive all the dangers of inoculation of bygone days—in establishing facts of such great importance, the experiments directed by M. Chauveau have rendered an incontestable service to science and to medical practice."

Such was the opinion expressed by the Representatives of the Academy of Sciences with regard to the Lyons experiments, and after reading the account of them, and knowing well the very trustworthy character and great professional ability of M. CHAUVEAU, Mr. FLEMING thinks no doubt whatever can be entertained as to the justice of that opinion.

A few years later than this there was appointed an Italian Medical Commission, which carried on similar experiments and investigations at Turin, from 1871 to 1874, and came to the same conclusion that CHAUVEAU did—that human smallpox cannot be converted into cow pox when the virus is transferred to bovines, but always preserves its original character.

With reference to the effect which inoculation of smallpox matter on kine produces, the Commission referred to found, at first, but very little sign of either constitutional or local impression. Some experimenters concluded, as our correspondent in the last number, that cattle cannot

be successfully inoculated with smallpox virus. But other experiments proved this to be a fallacy; and a drawing accompanying the report shows the perineal region of a bull calf, on the left side of which five sub-epidermic variolous inoculations had been made, and the effect of which had arrived at its *summum* of development. There were small, red, slightly prominent papules, from two to four millimetres in diameter, and slightly conical, in the centre of which the inoculation puncture could be distinguished. These papules commenced to develop on the second day, and on the fifth had arrived at the dimensions shown in the drawing. On the twelfth day they had completely disappeared, after furnishing at the seat of puncture an extremely small, darkish crust. This course was not observed, however, in all the inoculated animals; but it was remarked that the deep punctures did not furnish more evident results than the sub-epidermic ones.

Further study of the subject led to a highly important discovery, to wit, that the relations of variola to vaccinia are, in fact, mutually exclusive; that as man when vaccinated with vaccinia lymph cannot contract variola; so cows inoculated with variola lymph, cannot contract vaccinia. Their formal conclusion, therefore, was, that variolization exercises a neutralizing influence on the development of vaccinia; and that the slightly marked eruption, so undecided in character, caused by the inoculation of smallpox virus on bovines, is of a specific nature—in this species presenting, with the cowpox, the same relations that variola and vaccinia do to each other in the human species.

The conclusion, therefore, is irresistible, that animal lymph for vaccination purposes must, in the first instance, be obtained from a cow in which the disease vaccinia has spontaneously arisen; and the supposition is strong that any lymph which has been obtained from a cow which has been either inoculated or vaccinated from matter obtained from a human subject is either inert and worthless, or else positively injurious and dangerous.

Notes and Comments.

Therapeutical Notes.

Prescriptions in disturbed menstruation.

In the Chicago *Medical Gazette*, January 20, 1880, the following formula is recommended as a valuable remedy for scanty, irregular menstruation, when associated with and dependent upon anæmia, neuralgia and neurasthenia:—

℞. Tincturæ ferri chlor., ℥ x
Liquor. potassæ arsenitis, ℥ ij. M.

Sig.—Twelve drops after each meal, through a glass tube, in about one-third glass of water.

From the same source we are informed that the following prescription is specially serviceable in the various nervous manifestations which often accompany the menopause:—

℞. Sodii bromidi, ℥ iv
Tincturæ nucis vomicæ, ℥ ij
Elixir. calisayæ, ℥ ij
Syrupi pruni virg., ℥ j
Elixir. simplicis, ℥ vj. M.

Sig.—Two drachms, two, three, or four times a day, as needed.

Benzoate of sodium in ulcerated sore throat.

Dr. William B. Davis, of Cincinnati, recommends the following formula for ulcerated sore throat:—

℞. Sodii benzoatis, ʒ ss
Syr. tolu,
Aquæ menth. pip., āā ℥ ij. M.

Sig.—Half an ounce every three hours.

Catillon's chloral pomade.

In *Union Médicale*, November 18, 1879, the following formula is given: Chloral six, lard twenty-seven, and white wax three parts, by weight. This is an anodyne ointment which may be substituted for chloroform pomade, remaining active for a longer time, owing to the fixity of the chloral.

Borocitrate of magnesia as a solvent of uric acid calculi.

Dr. Koehler, of Kösten, in *Berliner Klinische Wochenschrift*, November 3, 1879, recommends the above salt in cases of gravel, or probable uric acid calculus. It is prepared by dissolving boracite, a natural borate of magnesia, which is found at Stassfurt, and hence is also called Stassfurtite, in citric acid. It forms a white powder with a sourish taste. He gives it mixed with white sugar (one to two). The dose is a large teaspoonful in half a tumbler of water three times a day.

The Quinine Question.

The Messrs. Rosengarten, of this city, have written an open letter on the quinine question, in which they say—

"To possess an independent domestic supply of quinine is a matter of prime necessity for this country, with its great regions of territory specially subject to malarial diseases. The manufacturers of quinine ask only that measure of protection which is necessary to countervail the tariff and internal revenue taxes on the articles they use and the prevailing low rate of wages abroad. The recent repeal of the duty was made without the report of any committee of Congress, and without discussion in the House of Representatives. The agitation for the repeal of the duty on quinine originated with importers and speculators, and they are the only persons benefited by the measure. A foreign war, or the ravages of disease in Europe or the East, would enable speculators to advance the price to a point which would injure all consumers."

It is claimed by the manufacturers that the plan proposed in the REPORTER, of the Government allowing a drawback equal to the tariff and revenue taxes, is impracticable. We are not convinced that such is the case; but certain it is that the act, as it now stands, injures home production, while it does not, and will not, benefit consumers. We ask our Tennessee friends if their patients get their quinine one cent less than they did before?

A Wonderful Story Refuted.

At a late meeting of the London Obstetrical Society a paper, by Dr. Robert P. Harris (Philadelphia), entitled "A Complete and Authoritative Refutation of the Marvelous Account given by Professor Claude M. Gardieu, of Paris, in 1816, to the effect that the Princess Pauline de Schwartzenberg was delivered of a living fœtus some hours after she was burned to death," was read. The author said the story told by Professor Gardieu was that the Princess perished from the effects of burns received at a fête given in the house of the Austrian Ambassador, her brother-in-law, on July 1, 1810; that she was pregnant, and the infant was found alive, although she was not opened until the day after the accident. From research among contemporary authorities, the author found that the ball was given in a large temporary wooden building, and the fire broke out soon after dancing commenced. The Princess escaped with others, but rushed back to seek for her daughter, and so perished. In the morning the disfigured remains were recognized as hers by a piece of gold jewelry. Madame Junot writes that "her body, with the exception of her bosom and part of one arm, was burned to a cinder." The *Court Journal* of July 3, 1810, states that the Princess was *four months* pregnant. No mention is made of the case in the medical journals of the time. This story, therefore, which was repeated by Gardieu in his third edition, quoted by Velpeau, and has attained general notoriety, is absolutely without foundation.

The Dry Earth System and Earth Closets.

Among recent deaths in England is that of the Rev. H. Moule, who has the credit of having introduced the dry earth system of disposing of excreta in its modern form. It has, indeed, fallen somewhat out of use in the last few years, but many still claim for it the best of results.

For ourselves, we can say that we have repeatedly observed the effects of the use of dry earth in disinfecting excreta, and the various forms of "earth closets" were examined with strong prepossessions in their favor. Finally, however, we have been forced to the conclusion that all kinds are practically failures. We have yet to know any that have given satisfaction. They are troublesome at all times, and frequently offensive.

The Diagnostic Value of Temperature in Intestinal Obstruction.

At a meeting of the Cincinnati Medical Society, March 9, 1880, Dr. John Davis called attention to the importance of using the thermometer in examining cases of intestinal obstruction. He had been once called in consultation, to see a child, eight years old, suffering from this condition of her bowels, which had been considered as a case of simple constipation. Upon applying the thermometer, however, it was found that the temperature was 104° F.; showing that there was inflammation present.

Does Alcoholism Lead to Insanity?

Most physicians would say yes, to this question In most reports of insane asylums inebriety figures as a cause. On the other hand, Dr. Joseph Seaton, an English author of repute on mental affections, writes to the *Lancet* as follows:

"I have now been specially engaged in the treatment of mental affections for a period of some thirty-six years. In the course of my practice I have met with many cases of insanity in which

there was the propensity to take stimulants in excess; but in every case in which I had the means of obtaining reliable information as to the history of the patient, I have been able to trace the mental disease as existing before the intemperance."

Cold Air as an Antipyretic and Antiseptic.

The *Allegem. Méd. Central-Zeitung*, February 7 and 11, 1880, contains a very interesting article on the above subject, by Dr. Von Kraczorowsky, who was first led to regard cold air as a valuable agent in the treatment of febrile diseases by the following incident:—

Toward the end of the smallpox epidemic of 1871, during the month of February, in a temperature of about 12° R. (5° Fahr.), a male patient, twenty-three years of age, in the beginning of the suppurative stage of confluent smallpox, jumped, during the night, while delirious, from a first-story window down on the street, where he wandered about in his night clothes until picked up by the police and brought back to the hospital. The next morning he was entirely free from fever; the pustules which the day before had been distended with lymph were now depressed and began to dry, and the patient was considered convalescent. A short time afterward two women, one of them of intemperate habits, covered with hemorrhagic variola, and apparently in a moribund state, had, under similar circumstances, left the ward and passed the night on the cold brick floor of a hall, the temperature of which was below the freezing point. Both recovered rapidly.

Although none of the other patients were found willing to expose themselves directly to the frost, the author determined at least to leave the windows open night and day, and allow no more fire. By this procedure the temperature of the wards was kept at about 6° R (46° Fahr.) and although the patients revolted against these measures, there was only one more death, an old man of seventy.

Encouraged by this powerful antipyretic effect of cold air, the author next determined to use it in scarlatina. The patients were only covered with a thin linen cover, they were sponged every two or three hours with a solution of glycerine (one to three) and were given, every half-hour, a three-per cent. solution of chlorate of potassium, with good nourishment, milk, wine, etc. Out of forty-seven patients treated in this way, only one died from secondary nephritis complicated with pericarditis. The fever would leave on the third, and the rash begin to fade on the fourth day.

In the treatment of erysipelas excellent results have also been obtained by exposing the patients to a low temperature, while at the same time the skin surrounding the affected part has been freely rubbed in with carbolic acid and ol. terebinth, (one to ten).

The author has also employed the cold-air treatment, with similarly happy results, in typhoid fever, pneumonia, pleuritis, cerebro-spinal meningitis, rheumatism, and also in chronic pulmonary affections; as, pulmonary gangrene, bronchitis, and in the hæmoptysis of phthisis.

The lowering of the bodily temperature under this treatment is not so sudden as that produced by cold baths, nor have cough and other troublesome symptoms been known to result from it, even when the patient has been lying directly in the draught, during a severe snow storm. On the contrary, fever patients feel comfortable in a room where there is no fire, and where all the windows are left open. The author has never succeeded in reducing the temperature of the sick room below 4° R. (41° Fahr.). The lowering of the bodily temperature is also less rapid under this treatment than that produced by cold baths; as soon as it becomes normal, the patient is removed to another room, which is then gradually heated. The author gives the history of a large number of cases.

Local Faradization in Impotence.

Dr. Ultzmann, of Vienna, gives, in a reprint from the *Wiener Klinik*, a discussion of the neuroses of the genito-urinary organs. In the treatment of these troubles he teaches that electricity plays an important part. Faradization, he says, of the bulbo-cavernosus and ischio cavernous muscles is a useful proceeding in impotence. It is best effected by using one of the electrodes internally, in the rectum, while the other may be placed externally.

The Use of Turpentine in Cancer.

That such a familiar substance as turpentine should be found of value in cancer is somewhat surprising. Nevertheless, Dr. John Clay, of Birmingham, England, relates, in the *Lancet*, March 27th, several cases in which Chian turpentine, freely administered, thirty to sixty grains a day, really seemed to modify favorably the disease as it appeared in uterine schirrus and epithelioma. He thinks he can safely assert that when the remedy is steadily used for some time

it arrests the progress of the disease and relieves the pain incidental to the malignant growth. Certainly, if it will accomplish this the discovery will prove one of the highest importance in therapeutics.

Hydrate of Chloral in Acute Gastro-Enteritis of Children.

Prof. Adolph Kjellberg writes, in *Nordiskt Medicinskt Arkive*, vol. xi, No. 3, that there is no medicine which is of so much use as chloral in checking the vomiting in acute gastro-enteritis of children. Being rapidly absorbed it stops the vomiting, calms the patient, and often checks the diarrhœa. It is best given by enema, so as not to risk its rejection by the irritable stomach. It should be given soon after the bowels have been moved. The dose for a child of from five to six months is twenty-five to thirty centigrams (three and a half to four grains), while to a child of from twelve to fifteen months, fifty to sixty centigrams (seven to eight and a half grains) may be given. The bulk of the injection should not exceed a dessertspoonful. The enemata may be repeated two or three times daily, and the dose may be increased if it is found necessary. In order to increase the effect of the chloral the author generally adds to each enema a drop of the tinct. opii, and if stimulants be indicated, five to fifteen drops of liq. Hoffman. At the same time other remedies are not neglected; iced water, or cognac, or champagne for the vomiting, opium for the diarrhœa, hot mustard baths for albuminuria, should it occur, stimulants for collapse, etc.

The Value of Revaccination.

The *Medical Times and Gazette* informs us that while smallpox is prevailing extensively amid the civil population of Paris, so as to give rise to seventy or eighty deaths weekly, it is almost absent in the large military force which constitutes the garrison. This is entirely due to the rigidity with which revaccination is enforced. It is stated that there are not more than twenty cases in the military hospitals, most of them being only examples of slight varioloid, and no deaths having occurred. Every year for some time past revaccination is enforced on the arrival of the contingents; and a great number of men have been revaccinated this year in whom revaccination did not succeed last year. Every revaccination is performed from children's arms, whose parents are paid fifteen francs per sitting. What few cases of smallpox do now occur take place among the officers, or in obstinate or timid men who manage to evade revaccination.

Correspondence.

Veratrum Viride in Puerperal Convulsions.

Ed. Med. and Surg. Reporter:—

I was sent for on the 1st inst., to see Linda James, colored, 19 years of age, primipara, of medium size. She had suffered pains during the previous night, which were very severe when I saw her. She had general anasarca. Her feet, hands and face were tense, from the effusion. Quick, small pulse, and dilated pupils. Complained of headache and thirst. Made a vaginal examination and could not reach the mouth of the womb; examined her urine and found it heavily loaded with albumen; quantity of urine scant and highly colored. I bled her, to the amount of a quart, and the pains subsided in a few hours. She was directed to take the following:—

℞. Infusion digitalis, ℥iv
Acetate pot., ʒss. M.

Sig.—Tablespoonful every four hours during the day.

She also had laxative doses of bitartrate of potassium, every day. The swelling was reduced rapidly, and she progressed finely until the medicine was exhausted. As the prescription was not continued, from neglect on the part of the patient, the dropsy returned and her bladder became irritable, and there was a very scanty secretion of urine. On the 6th I was again sent for and found her in convulsions. Before anything could be done she had the second convulsion, which lasted for ten or fifteen minutes, after which she was comatose. I let her inhale a small quantity of chloroform, to quiet the convulsions, and again bled her, to the extent of 16 ounces. On making a vaginal examination the os was found dilatable and about the size of a nickel. Pains slow and of short duration. She remained comatose for the space of an hour, when symptoms of convulsions again returned, and I immediately injected, hypodermically, three drops of Norwood's veratrum viride. Her pulse, which had been rapid since the bleeding, gradually became slow and full, and the muscular twitchings ceased. Labor advanced tediously, with occasional symptoms of convulsions, which were controlled by a repetition of the injections of tincture of veratrum viride. The veratrum was repeated about every two or three hours, until consciousness returned, and all symptoms subsided.

About six hours after the last dose of veratrum viride had been given and the muscular twitching again appeared, chloroform was administered, for the purpose of controlling an anticipated return of the convulsions, and to deliver her by the forceps, as the head had descended and engaged, and the pains, though vigorous, were ineffectual. After delivery by the forceps she was comfortable and cheerful. The convulsions never returned. Her bladder was emptied

several times during labor, by the use of the catheter, and urine examined. The quantity of albumen had increased. She has, since delivery, been passing large quantities of limpid urine, and the dropsy has subsided. The child was born dead. Her pelvis was not roomy, and a great deal of force was necessary to deliver. It is possible that the amount of force used was sufficient to destroy the child's life during delivery. The successful use of veratrum viride in this case in controlling anticipated convulsions has prompted me to report it. The detection of albumen in large quantity in the urine is sufficient evidence, in connection with the resulting anasarca, of its being a case of acute Bright's disease, complicating the puerperal state, and the prime cause of the convulsions.

W. N. AMES, M.D.

Starkville, Miss., March 12, 1880.

A Case of Early Viability.

ED. MED. AND SURG. REPORTER:—

The following is a case of considerable interest:—

Mrs. M., aged 16, married, fell down stairs during the fifth month of her first pregnancy, causing fœtal death. The symptoms following not attracting the attention of the lady herself or her husband, no physician was called until three weeks later, when abortion took place, the fœtus being almost entirely disorganized.

About two years later Mrs. M. became pregnant again. December 8th, 1878, was taken in labor, without any exciting cause. She was then in about the last of the fifth or first of the sixth month of pregnancy; in due time delivery of a female child was accomplished. The case being attended by a midwife, and she considering it one of abortion, simply folded the child in a flannel blanket and laid it away, thinking it unnecessary to direct immediate attention to what she supposed to be a lifeless child. Twenty-five or thirty minutes had elapsed, and the little stranger had not as yet received any further attention, and becoming somewhat impatient, endeavored to let its fellow creatures know that there was another living being in the world, by giving a "yell," which was very feeble, but sufficient to attract attention; but still the attending midwife and assistants were disinclined to be bothered with such a speck of humanity, thinking it impossible for life to be maintained longer than a few minutes at the most; yet she was earnestly requested by the parents to attend to her duties, any way. Thereupon the midwife proceeded to dress the child, which was already breathing.

Respiration continued day after day; food was administered drop by drop, though muscular action was almost invisible, until about the third month; the eyes now opened, and sufficient strength was gained to take the breast and cry a little. Up to this time this delicate little being had been nursed on a soft pillow; great care was taken to support the head, owing to the cranial walls being cartilaginous and very elastic. The child, from the third month, nursed regularly, and seemed to grow faster than before. Its length at birth was about nine inches and weight one and a half pounds. At this writing she is fifteen months old. The anterior fontanelle is larger than is usually found at birth, and pulsations are visible at that point; she has never had any sickness of any consequence; can begin to walk. Weighs nineteen pounds, and seems to have as good a hold on human life as most children of her age.

Viability at the expiration of the fifth month, in this case, seems to be authenticated by the following facts:

1st. Menstruation not having ceased over five months previous to the birth of the child.

2d. The size and weight of the child at birth.

3d. Cartilaginous condition of the cranial bones.

4th. Abortion having taken place at the expiration of the fifth month in previous pregnancy.

King's Mountain, Ky. J. H. MOORE, M.D.

NEWS AND MISCELLANY.

A Criticism Upon the National Board of Health.

At a meeting of the Georgia Medical Society of Savannah, held March 23, 1880, the bills now before Congress to increase the power of the National Board of Health were discussed, and as it is contrary to the By-laws of the Society to pass resolutions upon matters of a public nature, it was decided that a paper be prepared expressive of the views of the individual members, to be signed by them and presented to the City Council, Cotton Exchange, and the people of Savannah. In accordance with these instructions, the following was offered:—

We, the undersigned, members of the Georgia Medical Society, view with apprehension the extraordinary and dangerous powers proposed to be conferred upon the National Board of Health by the bills introduced in Congress by Hon. Messrs. Harris and Young, and also that proposed by Mr. Acklen. The first section of Mr. Harris' bill provides "That the National Board of Health, or in the interval of its sessions its Executive Committee (of five), shall report to the President of the United States, whenever any place in the United States is considered by it to be dangerously infected with contagious or infectious disease, and that upon the official publication by the President of such report, the transportation of goods or persons from such place into another State shall be unlawful, and all persons guilty thereof shall be liable to prosecution therefor in the Circuit or District Court of the United States for any district within which such goods or persons shall be transported, and any goods so transported shall be liable to be seized and destroyed, unless such transportation shall be carried on in accordance with rules and regulations made by the National Board of Health and approved by the President, as in other cases. These rules shall apply until the President shall proclaim such place no longer dangerously infected, and in the meantime the Board, or its Executive Committee, shall report to him weekly, in writing, the sanitary condition of the place in question."

Mr. Acklen's bill provides for the establishment of quarantine stations upon all the avenues of approach to any place declared to be infected,

upon information furnished by the National Board of Health, at which points all freights or persons and their vehicles of transportation, if starting from or destined for a point beyond the borders of the State, shall be inspected by the agents of the National Board of Health, and after they shall have been declared by such agents free from infection, any person or authority whatsoever who shall interfere with the free passage of such person, freight or vehicle of transportation, on the charge that they are infected or dangerous to the public health, shall, on conviction before a United States court, be fined one thousand dollars and imprisonment one year.

We consider the provisions of these bills as dangerous, revolutionary and useless, should they become laws. We protest most strenuously against conferring such extraordinary powers upon any National Board of Health, believing that such powers could be used to destroy our commerce and liberties, and are subversive of the rights of States.

We earnestly appeal to the municipal authorities, the merchants and the public of Savannah to unite in a protest against the enactment of such laws. We would further suggest the holding of a convention, in which all of the Atlantic and Gulf States should be requested to participate, in order to frame a bill wherein our common weal should be explicitly provided for.

This was signed by twenty-one of the members and seven other physicians practicing in Savannah, and also by twenty-four members of the Cotton Exchange.

Saving Time.

Dr. Clemenceau, the eminent French physician and member of the Legislature, is remarkable for his quickness in the despatch of business. Two men entered his consulting room simultaneously the other day. The first, in reply to, "What is the matter?" said he had trouble in the chest, and was ordered to take off his shirt. While prescribing the Doctor ordered the other visitor in and said, "Just take your shirt off, too; it will save time." He immediately did so, and, by the time the Doctor had written the prescription for the first man and received his fee, he was stripped to the waist. "You are suffering from pain in the chest too, are you not?" "Well, no," said patient No. 2, "I come to beg you would recommend me for a place in the Post Office."

Brooklyn Anatomical and Surgical Society.

The third semi-annual course of Monday evening lectures and demonstrations is now in progress. Among the subjects are: The female Perineum—its Anatomy, Physiology and Pathology, by Prof. T. Gaillard Thomas; Litholapaxy, by Prof. Edward L. Keyes; Anatomy and Physiology of the Spinal Cord and Motor Tract of the Cerebrum, by Landon Carter Gray and by Prof. Edward C. Seguin; Deformity from Fractures involving or approximating the Elbow Joint, by Dr. Oscar H. Allis, of Philadelphia; Clinical Anatomy, by Prof. William W. Keen, of Philadelphia, etc.

QUERIES AND REPLIES.

Ethics, of N. J.—1. In asking a neighboring physician or one in the same town to assist in an operation—to give the anæsthetic, or any other duty—what should his fee be, or should he give his services as a friendly or brotherly act? 2. When one physician asks another to consult with him, either for his own benefit or that of the patient, and where the patient or his friends have not asked for a consultation, should any fee be asked, offered, or given?

Ans.—1. As a friendly act. 2. No; the patient or friends should, at the request of the attending physician, give their assent to the consultation.

T. S. S. writes: I want to relate a case to you, and ask if you or any of your many readers have met with one which was parallel. L. D., colored, aged fifty-three years, youngest child fourteen years old. She ceased to menstruate eight years ago, or at the age of forty-five years; has a grandchild whose mother did not give any milk, from ill health. The old negress, in order to quiet the grandchild, applied it to her own breast occasionally. In a few days her breasts began to enlarge and furnish milk, and she nursed it from her breast, with a bountiful supply, from the time it was two weeks old until over a year, and when she weaned it was giving a sufficient quantity of milk to have sustained it. I know this to be the case, and hundreds can testify to the same.

Ans.—There are several similar cases on record, and some of virgins, and even men, nursing infants, the application of the child to the breast being often a sufficient stimulant to produce a flow of milk.

J. N. P. says: I have a case of articular rheumatism (chronic). The patient uses a room in which there are a hundred and fifty dressed and filled birds, varying in size from a humming bird to the white crane, for warming and sitting purposes. The birds have been dressed with arsenic dressing, of which there has been about five pounds used. The room in which the patient sleeps is adjacent, and the door opens close to the dressed birds. It has been a question with me if the arsenic used in the preparation, together with the confinement, does not have something to do with the disease. Will some of your readers favor me with their opinion?

Pruritus asks: What is "winter itch," and what is the most successful plan of treatment. I am a victim, and find it a most distressing affection. When the weather is cold, after being out a little while, the itching commences as soon as I am warmed, and at night I become almost wild with the itching and burning. No eruption, except that produced by scratching. It is not present at all in summer. Will your readers please give me the benefit of their experience, and oblige.

Ans.—The writer evidently suffers from pruritus hiemalis, a monograph on which has been written by Dr. Duhring, of this city, to which he is referred.

MARRIAGES.

BOWEN—MONTAYNE.—On March 17th, 1880, at the residence of the bride's father, by the Rev. T. P. Coulston, George W. Bowen, M.D., and Miss Annie Montanye, all of Frankford, Twenty-third Ward, Philadelphia.

DEATHS.

MURDOCH.—At Pittsfield, Mass., March 8th, 1880, at the residence of his son-in-law, Dr. W. E. Vermilye, Carey Murdoch, for many years a resident of New York city, aged 79 years.